calculated using the aspect ratio of the bounding box in the image data;

a height comparer for comparing the height of the representation of each object generated in dependence upon image data from the first camera with the height of the representation of the corresponding object generated in dependence upon image data from the second camera; and

an object representation generator for generating object representations in the three-dimensional computer model in dependence upon the height comparisons.

## REMARKS

Claims 1-116, 118-29, 131-66, 168-79, 181-92, 195-204 and 207-54 are now in this application. Corrected drawings as required in the form PTO-948 are being prepared and will be submitted shortly. Claims 1, 7, 11, 21, 23, 29, 33, 40 and 237 have been amended to define still more clearly what Applicants regard as their invention. Claims 2-6 and 24-28 have been canceled without prejudice or disclaimer of subject matter. Claims 252-54 have been added to assure Applicants of a full measure of protection of the scope to which they deem themselves entitled.

Applicants note with appreciation the allowance of Claims 22, 24-39, 41, 44-116, 118-29, 131-66, 168-79, 181-92, 195-204, 207-36 and 238-51 and the indication that Claims 6-10 and 14 would be allowable if rewritten so as not to depend from a rejected claim, and with no change in scope. The features of Claims 6 (and interventing claims) have been incorporated into independent Claims 1, 23 and 237, and those of Claim 14 (and intervening claims), into independent Claims 21 and 40. All of these claims are therefore deemed now to be in condition for allowance.

Newly-added independent Claims 252, 253 and 254 correspond to original Claims 1, 23 and 237, respectively, but including the features of Claim 14 and all intervening claims, as well. Claims 252-54 are therefore also thought to be in condition for allowance.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other rejected claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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VERSION OF CLAIMS MARKED TO SHOW THE CHANGES MADE

1. (Currently Amended) A method of processing image data defining a plurality of sequences of images, each from a respective camera, of a plurality of objects moving in a scene to produce signals defining representations of the objects in a three-dimensional computer model, the method comprising the steps of:

processing image data from a first of the cameras to identify image data relating to objects in the scene;

processing image data from a second of the cameras to identify image data relating to objects in the scene;

processing the identified image data from the first camera for each object to define an object representation in the three-dimensional computer model [a modelling space] having a height dependent upon the image data for the object from the first camera;

processing the identified image data from the second camera for each object to define an object representation in the three-dimensional computer model [modelling space] having a height dependent upon the image data for the object from the second camera;

comparing the height of the representation of each object generated in dependence upon image data from the first camera with the height of the representation of the corresponding object generated in dependence upon image data from the second camera; and

generating object representations in the three-dimensional computer model in dependence upon the height comparisons,

wherein, when the heights of the corresponding representations are not within a predetermined amount of each other, the taller representation is split into a first portion having

a height corresponding to the height of the smaller representation and a second portion comprising the remaining part of the taller representation, and wherein a further representation is defined in the three-dimensional model by re-positioning the second portion in the three-dimensional model.

2. - 6. (Canceled)

7. (Currently Amended) A method according to claim 1 [6], wherein the second portion is re-positioned in dependence upon a representation defined on the basis of image data from the camera which produced the smaller representation.

11. (Currently Amended) A method according to claim 1, wherein each object representation is defined as a planar surface with its base on a predetermined surface in the three-dimensional computer model [modelling space] and with a position and size in dependence upon a polygon bounding the image data for the object.

21. (Currently Amended) A method of image processing in which image data from first and second cameras is processed to identify image data relating to respective objects, the height of each object in a modelling space is determined using the identified image data, and the heights of objects determined using image data from the first camera are compared with the heights of objects determined using image data from the second camera to

determine which if any identified image data relates to more than one object,

wherein each object is defined as a planar surface with its base on a predetermined surface in the modelling space and with a position in dependence upon a polygon bounding the image data for the object, and wherein the width of the planar surface is determined by the width of the bounding polygon in the image data, and the height of the planar surface is calculated using the aspect ratio of the bounding polygon in the image data.

23. (Currently Amended) An image processing apparatus for processing image data defining a plurality of sequences of images, each from a respective camera, of a plurality of objects moving in a scene to produce signals defining representations of the objects in a three-dimensional computer model, the apparatus comprising:

means for processing image data from a first of the cameras to identify image data relating to objects in the scene;

means for processing image data from a second of the cameras to identify image data relating to objects in the scene;

means for processing the identified image data from the first camera for each object to define an object representation in the three-dimensional computer model [a modelling space] having a height dependent upon the image data for the object from the first camera;

means for processing the identified image data from the second camera for each object to define an object representation in the three-dimensional computer model [modelling space] having a height dependent upon the image data for the object from the second camera;

means for comparing the height of the representation of each object generated in

dependence upon image data from the first camera with the height of the representation of the corresponding object generated in dependence upon image data from the second camera; and

means for generating object representations in the three-dimensional computer model in dependence upon the height comparisons,

wherein the apparatus is arranged to perform processing such that, when the heights of the corresponding representations are not within a predetermined amount of each other, the taller representation is split into a first portion having a height corresponding to the height of the smaller representation and a second portion comprising the remaining part of the taller representation, and wherein a further representation is defined in the three-dimensional model by re-positioning the second portion in the three-dimensional model.

24. - 28. (Canceled)

29. (Currently Amended) Apparatus according to claim 23 [28], arranged to perform processing such that the second portion is re-positioned in dependence upon a representation defined on the basis of image data from the camera which produced the smaller representation.

33. (Currently Amended) Apparatus according to claim 23, arranged to perform processing such that each object representation is defined as a planar surface with its base on a predetermined surface in the three-dimensional computer model [modelling space] and with a position and size in dependence upon a polygon bounding the image data for the

object.

40. (Currently Amended) An image processing apparatus operable to process image data from first and second cameras to identify image data relating to respective objects, to determine the height of each object in a modelling space using the identified image data, and to compare the heights of objects determined using image data from the first camera with the heights of objects determined using image data from the second camera to determine which if any identified image data relates to more than one object, wherein the apparatus is arranged to perform processing such that each object is defined as a planar surface with its base on a predetermined surface in the modelling space and with a position in dependence upon a polygon bounding the image data for the object, and such that the width of the planar surface is determined by the width of the bounding polygon in the image data, and the height of the planar surface is calculated using the aspect ratio of the bounding polygon in the image data.

237. (Currently Amended) An image processing apparatus for processing image data defining a plurality of sequences of images, each from a respective camera, of a plurality of objects moving in a scene to produce signals defining representations of the objects in a three-dimensional computer model, the apparatus comprising:

an image data identifier for processing image data from a first of the cameras to identify image data relating to objects in the scene, and for processing image data from a

second of the cameras to identify image data relating to objects in the scene;

an object representation definer for processing the identified image data from the first camera for each object to define an object representation in the three-dimensional computer model [a modelling space] having a height dependent upon the image data for the object from the first camera, and for processing the identified image data from the second camera for each object to define an object representation in the three-dimensional computer model [modelling space] having a height dependent upon the image data for the object from the second camera;

a height comparer for comparing the height of the representation of each object generated in dependence upon image data from the first camera with the height of the representation of the corresponding object generated in dependence upon image data from the second camera; and

an object representation generator for generating object representations in the three-dimensional computer model in dependence upon the height comparisons,

wherein the apparatus is arranged to perform processing such that, when the heights of the corresponding representations are not within a predetermined amount of each other, the taller representation is split into a first portion having a height corresponding to the height of the smaller representation and a second portion comprising the remaining part of the taller representation, and wherein a further representation is defined in the three-dimensional model by re-positioning the second portion in the three-dimensional model.